

## DESCRIPTIONS OF MICRO-LEPIDOPTERA FROM MORETON BAY.

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I shall endeavor in these papers to give a complete list of the species which I have been able to identify as occurring in the neighborhood of Brisbane under the head of each genus treated of; and to describe any species believed to be new with regard to whose generic position I feel satisfied. The admirable work of Mr. Meyrick on the Australian micro-lepidoptera has alone rendered any such work by a local naturalist possible, and I cannot too strongly express my indebtedness to his papers for any worth that my own may possess. I must also express my indebtedness to Mr. Lower, of Adelaide, for advice and assistance, and to Dr. Lucas and Mr. Illidge, of Brisbane, for access to their valuable collections.

### GRACILARIDÆ.

#### GRACILARIA, Z.

This beautiful and easily recognised genus appears to be well represented about Brisbane. Besides the twenty-one new species here described, I have obtained here the following:—

*Grac. xanthopharella*, Meyr.

“ *plagata*, Stt.

“ *autadelpha*, Meyr.

“ *calicella*, Stt.

“ *chalconoptera*, Meyr.

“ *formosa*, Stt.

“ *ida*, Meyr.

“ *eumetella*, Meyr.

“ *laciniella*, Meyr.

“ *albomarginata*, Stt. (?)

I have reared *Grac. laciniella*, Meyr., from larvæ, using the leaves of *Eucalyptus* sp. I am not quite certain of the identification of *Grac. albomarginata*, Stt., but I have one specimen which generally corresponds to the description, except in having blackish antennæ.

#### GRAC. PLAGATA, Stt.

Middle tibiæ very much thickened with greyish-ochreous

black-tipped scales, forming a distinct crest on their upper surface.

Brisbane; taken occasionally on fences in September.

GRAC. ALBOSPERSA, n. sp.

14 mm. Head, thorax, and maxillary palpi greyish-ochreous. Labial palpi with apical fourth of second and terminal joints thickened with scales, so as to form minute tufts, greyish-ochreous; apical third of second joint, external surface and apical half of upper surface of terminal joint suffused with dark fuscous; extreme apex whitish. Antennæ longer than forewings, greyish-ochreous annulated with fuscous. Abdomen greyish-ochreous. Posterior third suffused above with fuscous, beneath with five pairs of black dots. Legs pale ochreous-fuscous; apical portions of tarsal joints dark fuscous; middle tibiæ densely thickened with dark fuscous scales. Forewings ochreous-fuscous, sparsely irrorated with black scales, with irregularly outlined white markings; a white dot on costa, near base, reaching to fold; a larger oblong white area on costa at one-fifth, reaching to fold; a similar area at two-fifths; two small irregularly outlined white dots on costa at three-fifths and four-fifths, and two more between the latter and apex; apex and anterior margin of two apical dots blackish; five white dots on inner margin at three-eighths, four-eighths, five-eighths, six-eighths, and seven-eighths, the first of which is larger than those following; cilia ochreous-fuscous, with two imperfect dark lines; beyond anal angle dark grey. Hindwings and cilia dark grey.

Resembles in coloring *Grac. syringella*, Fab. The minutely tufted apices of the labial palpi appear to be a peculiar character.

Brisbane; taken occasionally on fences in spring.

GRAC. CHLORELLA, n. sp.

12 mm. Head, face, and thorax whitish-ochreous. Maxillary palpi whitish-ochreous, with two black annulations; labial palpi externally blackish, extreme apex whitish-ochreous; internally whitish-ochreous, annulated with black at apex of second joint, about middle of terminal joint, and again before apex. Antennæ whitish-ochreous, sharply annulated with black. Abdomen dark ochreous-fuscous, becoming blackish at apex. Legs, anterior and middle tibiæ ochreous-fuscous, densely irrorated with black; middle tibiæ much thickened with scales; posterior tibiæ whitish, annulated with black; tarsi whitish, annulated with black. Forewings ochreous-fuscous with a greenish tinge, densely irrorated with black scales, these are especially dense over costal half of disc and towards base; five costal and four dorsal ill-defined irregularly outlined whitish-ochreous spots; cilia ochreous-

fuscous irrorated with black, at anal angle and inner margin dark grey. Hindwings and cilia dark grey.

In general appearance comes very near to *Grac. syringella*, Fab. Brisbane; one specimen on a fence in September.

GRAC. EURYCHEMA, n. sp.

15-16 mm. Head and thorax reddish-fuscous; face and maxillary palpi paler; labial palpi, terminal joint as long as second, stout, and obtuse at apex, dark fuscous, internal surface whitish. Antennæ longer than forewings, greyish-ochreous annulated with black. Abdomen ochreous-fuscous, anterior half of upper surface paler. Legs ochreous-fuscous; tarsi annulated with dark fuscous; anterior and middle tibiæ dark fuscous, the latter densely thickened with scales. Forewings reddish-ochreous-fuscous irrorated with blackish scales, especially on costa and inner margin; cilia reddish-ochreous-fuscous on costa, dark fuscous on hindmargin, dark grey on inner margin. Hindwings and cilia dark grey.

The resting position of this insect is an exaggeration of that common to most of the genus. The first two pairs of legs form a wide elevated arch on which the forewings closely appressed appear to rest at a very steep angle.

Brisbane; taken occasionally on fences in August and September.

GRAC. EUGLYPTA, n. sp.

14 mm. Head and thorax reddish-ochreous. Maxillary palpi whitish, apex reddish-ochreous; labial palpi whitish, extreme apex reddish-ochreous, and somewhat thickened with scales; terminal joint shorter than second, apex moderately acute, reddish-ochreous with two transverse fuscous lines on external surface. Antennæ larger than forewings, whitish-ochreous annulated with fuscous. Abdomen ochreous, upper surface suffused with fuscous posteriorly, two pairs of black dots on lower surface, apical tuft ochreous. Legs reddish fuscous; anterior femora upper half whitish, lower half dark fuscous; anterior tibiæ dark fuscous; middle tibiæ densely thickened with scales, bases of tarsal joints whitish. Forewings pale reddish-ochreous irregularly mottled with darker reddish-ochreous, the whole showing a violet reflection in oblique light; costa whitish-ochreous from one-fourth to apex; a distinct black dot on costa at one-fourth and another at one-half, beyond the latter are two or three very minute costal dots; cilia reddish-ochreous with two incomplete hindmarginal lines, on inner margin dark grey. Hindwings and cilia dark grey.

Apparently allied to the preceding.

Brisbane; one specimen on a fence in September.

## GRAC. XYLOPHANES, n. sp.

9-12 mm. Head and thorax reddish-ochreous. Face and maxillary palpi whitish-ochreous; labial palpi pale reddish-ochreous, second and terminal joint dark fuscous at apex, terminal joint also with a dark fuscous line at one-third on external surface. Antennæ longer than forewings, greyish-ochreous annulated with fuscous. Abdomen ochreous fuscous, paler beneath. Legs whitish, apex of tarsal joints fuscous; lower third of anterior femora dark fuscous; anterior and middle tibiae dark fuscous, the latter densely thickened with scales. Forewings reddish-ochreous, becoming whitish-ochreous on costa, irregularly mottled with reddish-fuscous; an ill-defined transverse fascia of the paler ground-color at one-third, narrowing from costa to inner margin; a few minute fuscous dots on costa and hindmargin; cilia ochreous-fuscous with two darker lines, beyond anal angle dark grey. Hindwings and cilia dark grey.

The forewings are shorter than those of the preceding and proportionately broader. The markings of forewings are very obscure.

Brisbane; taken occasionally on fences in September.

## GRAC. OCTOPUNCTATA, n. sp.

10-12 mm. Head clear white. Thorax dark fuscous. Face and maxillary palpi whitish; labial palpi white, apex of second joint dark fuscous, terminal joint with two dark fuscous transverse lines at half and before apex. Antennæ grey annulated with dark fuscous. Abdomen above dark fuscous, beneath ochreous-fuscous. Legs dark fuscous, tarsal joints white except at apices, middle tibiae densely thickened with scales, upper half of anterior femora yellowish-white. Forewings dark fuscous, with four spots white, faintly yellowish tinged and narrowly outlined with black; first on inner margin at one-fourth, reaching to fold, produced along margin almost to base; second on costa before half, parallel-sided, outwardly oblique, not quite reaching fold; third on inner margin at two-thirds, broadest on margin, triangular or trapezoidal, reaching beyond fold; fourth on costa at three-fourths, similar to second, directed towards but not reaching anal angle; cilia dark fuscous with three blackish hindmarginal lines. Hindwings and cilia dark grey.

Brisbane; three specimens taken at light in April.

## GRAC. TRAPEZOIDES, n. sp.

10 mm. Head, thorax, and maxillary palpi pale grey; labial palpi whitish, second joint at apex, and terminal joint at three-fourths ringed with black. Antennæ grey, not annulated. Abdomen dark-fuscous above, whitish beneath. Legs whitish,



tarsal joints dark-fuscous at apex, anterior and middle tibiae dark-fuscous at base and apex, the latter scarcely thickened. Forewings ochreous-fuscous, with four inner marginal dots clear white and four costal streaks whitish-ochreous, all margined with dark-fuscous; first inner marginal dot close to base, parallel-sided, fascia-like, reaching almost to costa, upper margin ill-defined; second at one-fourth, triangular, with rounded apex, broadest on margin, reaching two-thirds across disc; third at half trapezoidal, broadest on margin, reaching slightly beyond middle of disc; fourth at anal angle, smaller, roundish—from it is a narrow whitish suffusion along hindmargin towards apex; costal streaks narrow, parallel-sided, outwardly oblique, at half, three-fourths, five-eighths, and just before apex; the second is twice as long as the others, and is directed towards but do not reach anal dot; apical angle narrowly black-margined; costal cilia black, hindmarginal ochreous-fuscous, inner-marginal dark-grey. Hindwings and cilia dark-grey.

Brisbane; two specimens taken by Dr. Lucas.

GRAC. IRRORATA, n. sp.

6-8 mm. Head, thorax, face, and maxillary palpi white. Labial palpi white, second joint at apex and terminal joint beyond middle annulated with black. Antennæ dark-grey. Abdomen fuscous above, whitish beneath. Legs white, anterior tibiae blackish; middle tibiae very slightly thickened, blackish at base and apex; posterior tibiae with three blackish annulations, clothed above with stiff white hairs; basal joints fuscous at apex. Forewings greyish-ochreous, with four white transverse fasciæ, all finely irrorated with greyish-ochreous scales, and thinly and irregularly outlined with black; first perpendicular at one-fourth, broad both on costa and inner-margin, produced along inner-margin to base, anterior margin encroached upon by ground-colour below centre of disc to almost half its thickness; second at half, perpendicular, margins slightly irregular; third from costa at three-fourths to inner-margin before anal angle, perpendicular, attenuated in centre of disc, where it is also interrupted by black scales; fourth from costa near apex to anal angle, where it is almost confluent with third, posterior margin ill-defined; hindmargin greyish-ochreous, narrowly edged with black; cilia whitish-grey, with two black hindmarginal lines. Hindwings and cilia grey.

Apparently allied to *Grac. ordinatella*, Meyr.

Brisbane; two specimens at light.

GRAC. CALICELLA, *Stt.*

This species is occasionally variable in its markings. In many Brisbane specimens the basal dot reaches costa to form a com-

plete fascia, as in Stainton's original description. I have one specimen in which the anterior costal dot is confluent with that on inner-margin at anal angle; and have seen another in which the anterior costal dot is altogether absent, while the anal dot is produced to costa, absorbing the posterior costal dot.

Brisbane. Taken commonly on fences in August and September. Also one specimen at Bulli, N.S.W., in October.

GRAC. ALBOMACULELLA, n. sp.

7 mm. Head, thorax, face, and maxillary palpi clear white. Labial palpi white, second joint at apex, and terminal joint beyond middle annulated with black. Antennæ dark-grey. Abdomen fuscous above, whitish beneath. Legs whitish, tarsal joints fuscous at apex, anterior and middle tibiæ dark-fuscous at apex, the latter slightly thickened. Forewings ochreous-fuscous, with one fascia and six spots, clear white, narrowly black-margined; first spot on inner-margin close to base, rounded above, not reaching to fold; fascia before one-third, slightly outwardly oblique, narrow and parallel-sided from costa to just before fold, where it suddenly dilates to treble breadth, and is thus confined to inner-margin; second spot on costa at one-half, slightly outwardly oblique, reaching one-third across disc, rounded below; third spot on inner margin at three-fourths, larger than second, rounded above, not reaching centre of disc, widely separated from second; fourth in disc at three-fourths, slightly above centre, very minute, connected with costa by a blackish cloud; fifth very small at anal angle; sixth parallel-sided, very oblique from costa at seven-eighths to middle of hindmargin; cilia ochreous-fuscous, with a black line near apex, on inner-margin dark-grey. Hindwings and cilia dark-grey.

Closely allied to *Grac. calicella*. Stt., and *Grac. hoplocala*, Meyr. Besides minor differences it may be distinguished from the former by the absence of one costal spot, and from both by the presence of an additional inner-marginal and a discal spot.

Brisbane; one specimen taken on a fence in August.

GRAC. OBSCURELLA, n. sp.

8 mm. Head, thorax, face, and maxillary palpi ochreous-whitish. Labial palpi ochreous-whitish, terminal joint annulated beyond middle with pale-fuscous. Antennæ longer than forewings, greyish-ochreous, gradually darkening toward apical half, which is dark-fuscous. Abdomen above ochreous-fuscous, beneath ochreous-whitish. Legs whitish, tarsal joints fuscous at apices; anterior and middle tibiæ fuscous, with two obscure whitish annulations, the latter moderately thickened at apex with dark-fuscous scales; posterior tibiæ whitish, clothed above with stiff

hairs. Forewings pale ochreous-fuscous, irrorated with darker scales; with five narrow indistinct transverse fasciæ, pale ochreous-fuscous, transverse or slightly outwardly oblique from costa at one-sixth, two-sixths, three-sixths, four-sixths, and five-sixths, the last two becoming obsolete towards inner-margin; a triangular whitish spot on costa before apex, extending into costal cilia; apex darker ochreous-fuscous; cilia pale ochreous-fuscous, with indistinct darker hindmarginal line. Hindwings and cilia dark-grey.

A very inconspicuous species, not nearly allied to any with which I am acquainted.

Brisbane; one specimen on a fence in September.

GRAC. ENCHLAMYDA, n. sp.

8.9 mm. Head and thorax whitish or ochreous-whitish. Face and maxillary palpi whitish. Labial palpi whitish. Antennæ dark-grey. Abdomen above dark-fuscous, beneath whitish. Legs whitish, tarsal joints dark-fuscous at apices; anterior tibiæ and first tarsal joints dark-fuscous; middle tibiæ with three dark-fuscous annulations, not thickened. Forewings whitish or ochreous-whitish, the middle third occupied by a broad fascia, ochreous-fuscous, narrowly edged with black, anterior margin outwardly oblique from costa, posterior margin less oblique, slightly convex; basal one-sixth of disc suffused with ochreous-fuscous; outside the transverse fascia are two variable longitudinal, parallel black lines, one in centre of disc, the other between that and costa; a roundish subapical costal spot, ochreous-fuscous, margined with black, or entirely blackish; extreme apex ochreous-whitish; cilia on costa ochreous-fuscous, on hindmargin whitish-ochreous, with median black line; on inner-margin dark-grey. Hindwings and cilia dark-grey.

A very distinct species, somewhat variable.

Brisbane; three specimens taken on a fence in August and September.

GRAC. IDA, *Meyr.*

The typical form of this species is occasionally taken near Brisbane.

GRAC. IDA var. ROSEA, n. var.

Very distinct in its coloration, forewings clear crimson-pink, without any fuscous suffusion; markings more yellowish-tinged than in the typical form, but agreeing closely in detail, though both forms show slight variations.

This beautiful insect is common about Brisbane. I have frequently beaten it from the native box (*Tristania conferta*), but do not know the larva. It is quite distinct from *Grac. formosa*, Stt., which is also occasionally taken near Brisbane.

## GRAC. AURORA, n. sp.

Head pale fuscous. Face silvery-white. Maxillary palpi yellow. Labial palpi reddish-orange, bases whitish, extreme apices fuscous. Antennæ longer than forewings, whitish-ochreous, with dark-fuscous annulations. Thorax reddish-violet above, bright yellow on sides. Abdomen above anteriorly whitish-ochreous, posteriorly ochreous-fuscous; beneath whitish. Legs, tibiæ reddish-violet, middle pair moderately thickened, tarsi whitish. Forewings brilliant-yellow; an ill-defined reddish-violet band, rather less than one-third breadth of disc, runs from base along inner and hindmargins to apex; in this band is a blackish dot at about one-fourth, and a second just outside this; several smaller blackish dots on inner margin, and five or six similar dots on hindmargin; cilia on costa yellow, on hindmargin reddish-violet towards apex, grey towards anal angle. Hindwings and cilia grey.

This brilliant insect appears to be allied to *Grac. adelina*, Meyr., from New Zealand.

Brisbane; one specimen taken on a fence in September by Dr. Lucas.

## GRAC. FLUORESCENS, n. sp.

8-9 mm. Head and thorax ochreous-whitish. Face and maxillary palpi white. Labial palpi white, second joint externally pale-fuscous. Antennæ dark-fuscous. Abdomen dark-fuscous above, white beneath. Legs, anterior femora white, tibiæ dark-fuscous, tarsal joints dark-fuscous at bases, white at apices; middle femora dark-fuscous, tibiæ whitish, slightly thickened, and dark-fuscous at apices, tarsi as above; posterior tibiæ dark-fuscous above, white beneath; tarsal joints dark-fuscous, with white apices above, wholly white beneath. Forewings brassy-fuscous; a sharply-defined inner-marginal streak, one-third breadth of wing, yellowish-white, with brilliant metallic lustre, ending abruptly just before anal angle, posterior extremity dilated to one-half breadth of wing; the posterior margin of dorsal streak is edged with black, and often contains a minute black dot; on disc at seven-eighths is a black spot of somewhat irregular form, surrounded by an incomplete circle of brilliantly-lustrous white scales; from this a yellowish-white metallic suffusion extends to hindmargin just beyond anal angle; before apex a black spot extends from costa to hindmargin; extreme apex lustrous-whitish; cilia on costa first black then ochreous-whitish on hindmargin, ochreous-whitish becoming whitish at anal angle, with a black basal line at apex, and a black sub-apical hook, on inner-margin dark-grey. Hindwings and cilia dark-grey.

Allied to *Grac. nereis*, Meyr.

Brisbane. Taken commonly on fences in August and September.

GRAC. NITIDULA, n. sp.

6.7 mm. Head and thorax brassy. Face and palpi silvery-white. Antennæ grey. Abdomen ochreous-whitish, suffused posteriorly with fuscous, beneath white. Legs white; tarsal joints pale-fuscous at apices on external surface; middle tibiæ slightly thickened at apices with fuscous scales. Forewings pale ochreous-fuscous, with irregular fuscous suffusion, several metallic areas, and a variable number of whitish-ochreous spots sometimes forming interrupted fasciæ; spots minute quadrangular, most numerous on costa, the remainder on inner-margin, they form interrupted slender transverse fasciæ at one-fourth and one-third; basal fourth of wing occupied by a brilliant metallic patch with reddish and violet lustre; a similar triangular patch on inner-margin beyond middle, not quite reaching costa; a small oval spot with long axis longitudinal in disc at seven-eighths, nearer costa than anal angle, showing brilliant violet-blue reflections; apex occupied by a rather large black spot; cilia brilliantly metallic on hindmargin, ochreous-whitish at anal angle, thence grey. Hindwings and cilia grey.

A minute but very brilliant species of uncertain affinity.

Brisbane. Five specimens taken in tropical forest growth.

GRAC. MICROTA, n. sp.

7 mm. Head and thorax ochreous-fuscous. Face and palpi white. Antennæ dark-fuscous, basal third grey, basal joint dark-fuscous. Abdomen above dark-fuscous, beneath white. Legs, femora white; anterior tibiæ and tarsi ochreous-fuscous, extreme apices of joints dark-fuscous, last two joints whitish; middle tibiæ and first two tarsal joints thickened throughout, ochreous-fuscous; posterior tibiæ upper surface with numerous stiff hairs, whitish-ochreous, black at apex, beneath clear white; posterior tarsi above whitish, apices of joints black, beneath clear white. Forewings ochreous-fuscous, confusedly marked with fine dark-fuscous dots and lines which do not form any definite pattern; on inner-margin before and beyond middle are two obtusely-triangular yellow spots reaching middle of disc; these contain one or two blackish dots; a minute metallic spot just before apex; cilia ochreous-fuscous, with a blackish hindmarginal line, on inner-margin dark-grey. Hindwings and cilia dark-grey.

An isolated species, unless it be distantly related to that next described.

Brisbane; One specimen at light.



## GRAC. PYROCHROMA, n. sp.

9-10 mm. Head and thorax bright-yellow. Face and maxillary palpi clear-white. Labial palpi white, second joint fuscous at apex, terminal joint with a median fuscous ring, beyond this yellowish. Antennæ longer than forewings, grey, basal joint yellow above, white beneath. Abdomen above fuscous, deepening in shade posteriorly, beneath white. Legs, anterior femora white, tibiæ and tarsi fuscous; middle tibiæ and first two joints of tarsi densely thickened with scales, reddish-fuscous, terminal joints not thickened, paler; posterior tibiæ and tarsi whitish. Forewings glossy reddish-purple, with darker purple dots, forming an interrupted line along costa; a bright-yellow dorsal streak from base, terminating abruptly at anal angle, edged with black, nearly half breadth of wing, indented to half its breadth, close to base and approximately at one-third, two-thirds, and at anal angle; costal edge from near base to apex occupied by a narrow, blackish-purple, irregularly-thickened line; internal to this is a narrow yellow line, sometimes suffused with reddish-purple; and internal to this again a longitudinal line in disc from two-thirds nearly to apex, with a metallic-blue lustre, narrowly bordered on each side with blackish; a brilliant-metallic spot at apex, and a yellow hindmarginal line continuous with that on inner margin; cilia whitish on costa, with a dark apical spot showing in certain lights a vivid-blue iridescence, on hindmargin reddish-fuscous, becoming paler towards anal angle, thence dark-grey. Hindwings and cilia dark-grey.

This brilliant insect rests with its head appressed to the surface. Except in the thickening of the basal tarsal joints of the middle pair of legs, it appears to agree structurally with this genus. I have not examined the neuration.

Brisbane; five specimens on a fence in August and September.

## GRAC. ALBISTRIATELLA, n. sp.

7-8 mm. Head, thorax, face, and palpi white. Antennæ dark-grey. Abdomen above fuscous, beneath reddish-fuscous. Legs, anterior and middle pairs fuscous, posterior whitish; middle tibiæ not thickened. Forewings pale ochreous-grey, with a white line along inner-margin, and five costal and three dorsal white streaks; first costal streak at one-third, outwardly oblique, narrowly produced along costa half way to base; second from beyond middle, very oblique outwardly, produced as a very slender line to margin of fourth streak; third shortly beyond second, outwardly oblique, occasionally connected by a slender line from its base with second; fourth lustrous, coalescing with third dorsal to form an outwardly curved, slender, black-margined fascia from costa to anal angle; fifth a mere dot beyond fourth; first and

second dorsal streaks parallel and close, outwardly oblique, from about three-fourths; a white line along hindmargin, broadening from apex to anal angle; a black dot shortly before apex; cilia grey, with a black apical dot and a black basal line along hindmargin. Hindwings and cilia grey.

Brisbane; three specimens.

GRAC. PARALLELA, n. sp.

8 mm. Head, face, and palpi pure white. Antennæ dark-fuscous. Thorax white, lateral margins fuscous. Abdomen fuscous. Legs dark-fuscous, apices of tarsal joints whitish; posterior pair whitish beneath, middle tibiæ not thickened. Forewings fuscous-grey, with a broad white stripe along inner-margin from base to anal angle, upper edge wavy, black-margined; immediately beyond or continuous with this is a white line from anal angle gradually alternating to about middle of hindmargin; a slender white black-margined line from costa to three-fourths to hindmarginal line at anal angle; a second similar line from costa before apex to extremity of hindmarginal line; a slender white line along costa from one-fourth to first streak, black-margined beneath; cilia white with a short median fuscous line at apex, thence white to anal angle, on inner-margin grey. Hindwings and cilia grey.

Allied to *Grac. didymella*, Meyr., and *Grac. ochrocephala*, Meyr. It may be distinguished from the former by the white line on costa, and from the latter by the pure white head and dorsal streak.

Brisbane.

GRAC. TRISTANÆ, n. sp.

7-8 mm. Head, face, and maxillary palpi pure white. Labial palpi usually pure white, second joint sometimes fuscous at apex. Antennal white, extreme apex fuscous. Thorax white, lateral margins ochreous-fuscous. Legs whitish, tarsal joints fuscous at bases, anterior and middle tibiæ fuscous, the latter not thickened. Forewings ochreous-fuscous, with a broad pure white streak extending along whole of inner-margin, and continued along hindmargin to end abruptly just before apex, its upper edge narrowly margined with blackish, wavy, and twice indented, first slightly opposite two-thirds of inner margin, and again deeply so as to be almost interrupted at anal angle; a white dot at apex; cilia white, with a black hook at apex, at anal angle and on inner-margin grey. Hindwings and cilia grey.

Allied to the same group as the preceding, but readily distinguished by the simpler marking of the forewings.

Larva slightly attenuated posteriorly, golden-brown without

markings, or with a fuscous oval spot placed transversely over dorsum of each segment, or over first segment only. Mines conspicuous blotches under the epidermis of the upper-surface of the leaves of the Native Box (*Tristania conferta*), and may be found in abundance during the greater part of the year.

Brisbane.

GRAC. UNILINEATA, n. sp.

7-8 mm. Head, face, and palpi white. Antennæ white at base, gradually deepening to fuscous. Thorax white, lateral margins ochreous-fuscous. Abdomen above ochreous-fuscous, darker posteriorly, beneath white. Legs whitish, tarsi ringed with blackish fuscous, anterior and middle tibiæ blackish-fuscous at apex. Forewings ochreous-fuscous; a white dorsal streak from base ending abruptly close to anal angle, less than half breadth of wing, straight-margined; a white line along hind-margin from anal angle nearly to apex; apex black; a short longitudinal black line in disc beyond three-fourths, narrowly and interruptedly margined with white externally; cilia white, with a median black line and black subapical hook, at anal angle and inner margin grey. Hindwings and cilia grey.

Brisbane; two specimens.

GRAC. PLEBEIA, n. sp.

Head, face, and palpi white. Antennæ white at base, gradually deepening to fuscous. Thorax white, lateral margins ochreous-fuscous. Abdomen above ochreous-fuscous, beneath white. Legs whitish, tarsi ringed with fuscous, anterior and middle tibiæ fuscous at extremities. Forewings ochreous-fuscous; a white dorsal streak from base ceasing abruptly close before anal angle, half breadth of wing, straight margined; along its margin and at its extremity the ground colour is suffused with dark-fuscous; a triangular white spot on hindmargin, its apex reaching nearly to costa; a white streak from costa at four-fifths to extremity of inner-marginal line, ill-defined towards costa; apical portion of costa black, interrupted by a narrow white line, which meets apex of hindmarginal spot; cilia white, faintly ochreous-whitish at apex, with a black median line and sub-apical hook, along inner-margin grey. Hindwings and cilia grey.

This and the preceding two species are very similar. *Tristania* may be distinguished by the indented inner-marginal line; *unilineata* by the straight inner-marginal line, less than half breadth of wing, and the short longitudinal black line on disc; *plebeia* by the straight inner-marginal line, half breadth of wing, and the triangular hindmarginal spot.

Brisbane; one specimen taken by Dr. Lucas.

## CECOPHORIDÆ.

In dealing with this family, I have endeavored to adhere faithfully to the genera as laid down by Meyrick; but have had to describe a few new genera which appear distinct from any of his. Of these the first two may not properly belong to this family at all; but as they are very distinct insects, and easily recognised, I hope that no confusion may arise from including them here temporarily. *Callizyga* is peculiar in veins seven and eight both running to hindmargin, in the short, stout, terminal joints of the labial palpi, and in the disparity of the sexes.

In *Scorpiopsis* the neuration appears to be normal, except in the sigmoid curve described by vein seven of the hindwings, but the palpi and shape of forewing are peculiar.

## CALLIZYGA, n. g.

Head loosely scaled, side-tufts moderate. Antennæ stout, in male strongly ciliated (3-4), pecten absent. Palpi moderate, second joint reaching base of antennæ, with appressed scales; terminal joint half as long as second, nearly straight, almost as stout as second. Thorax smooth. Forewings dilated, apex moderately acute, hindmargin sinuate. Hindwings as broad as forewings, cilia very short. Abdomen moderate in male, broad in female. Forewings with veins 7 and 8 stalked, both to hindmargin, 2 from before angle of cell. Hindwings normal. Sexes unequal.

## CALLIZYGA DISPAR, n. sp.

Male, 21-22 mm.; female, 31-35 mm. Head and thorax pinkish-grey. Face and palpi ochreous-grey. Antennæ ochreous-grey. Abdomen in male bright-orange, in female ochreous. Legs whitish-ochreous, anterior tibiæ and tarsi pinkish-grey. Forewings in male ochreous-grey, with a slight pinkish tinge; a few scattered fuscous scales, sometimes forming a streak from hindmargin below apex towards centre of disc; cilia orange-yellow; underside bright orange-red. In female pinkish-grey, with a slight ochreous tinge; a few scattered fuscous scales towards hindmargin; cilia yellowish. Hindwings and cilia in male bright orange-yellow. In female pale ochreous-yellow; cilia sometimes tinged with fuscous.

Brisbane. Beaten occasionally from *Eugenia*.

## SCORPIOPSIS, n. g.

Head with appressed scales, side tufts moderate, closely appressed, slightly projecting between antennæ. Antennæ moderate (ciliations in male unknown); pecten absent. Palpi long, second joint exceeding base of antennæ; terminal joint much shorter than second, rather stout, with a well-developed

short tuft on its posterior aspect shortly before apex. (Thorax imperfect.) Forewings moderate, apex rounded, hindmargin convex, not oblique. Hindwings broader than forewings, oblong-ovate, cilia less than one-third. Abdomen rather stout. Forewings with seven and eight long-stalked, eight to apex, seven to hindmargin, two from before angle of cell. Hindwings with v. 7 bent in a sigmoid curve so as to be approximated to six on disc, and diverging from it to hindmargin.

SCORPIOPSIS SUPERBA, n. sp.

Female, 20 mm. Head and face red, mottled with pale yellow. Palpi, second joint reddish-ochreous, internal surface whitish, ringed with white at apex, extreme apex red; terminal joint moderate, with a short posterior tuft about one-fourth its length just before apex, red, basal half whitish on posterior surface, apex beyond tuft whitish. Antennæ stout, reddish-ochreous. Thorax red mottled with pale yellow, shoulders white. Abdomen ochreous-whitish, tuft whitish. Legs whitish, anterior tibiæ and tarsi red, the latter with white annulations. Forewings somewhat dilated posteriorly, costa strongly arched, apex much rounded, hindmargin convex, rounded beneath, not oblique, inner margin sinuate; pale red irregularly suffused with fuscous, with numerous minute pale yellow spots; in posterior half these are arranged in longitudinal lines along the veins, which are slenderly outlined in fuscous between the spots; a fuscous line along costa to three-fourths, costal edge red; three larger pure white spots in disc at about one-fourth, and a fourth spot slightly beyond these; two lustrous silvery-white spots in costal portion of disc at three-fourths, one of these a small circular spot near costa, the other between this and centre of disc larger, oval, with long axis transverse, both finely outlined with deep red; a narrow fuscous hindmarginal line; cilia pale red with a pale fuscous median line, apices whitish-ochreous. Hindwings white faintly ochreous-tinged towards apices, cilia white.

Brisbane. One specimen taken by Dr. Lucas.

PALPARIA, *Wing.*

The following species of this genus have been taken in the neighbourhood of Brisbane:—

- Palparia aurata*, Walk.
- “ *uncinella*, Z.
- “ *semijunctella*, Walk.
- “ *pyroptis*, Meyr. (MSS.).
- “ *eonephela*, Meyr.
- “ *rectiorella*, Walk.



## PALPARIA SUBROSEA, n. sp.

Male, 25 mm. Head ochreous-fuscous. [Palpi broken.] Antennæ whitish-ochreous, ciliation in male 5. Thorax pinkish. Abdomen ochreous. Legs reddish-fuscous, tarsi fuscous, posterior tibiæ pinkish-grey. Forewings elongate, costa moderately arched, apex slightly produced, acute, hindmargin sinuate, very oblique; pale-red, irrorated with whitish-ochreous scales, especially along costa and hindmargin, where they replace the ground-colour; an ill-defined dark-fuscous line along posterior two-thirds of inner-margin; a dark-fuscous dot in disc before and a second after middle; cilia whitish-ochreous, at apex reddish, with a terminal fuscous dot. Hindwings as broad as forewings, whitish, towards apex rosy; cilia rosy, deeper at apex, becoming paler towards anal angle.

One specimen taken on Stradbroke Island, Moreton Bay, by the late Mr. Boreham.

Though the palpi are unfortunately broken off, there can be no doubt as to the location of this species, which is allied to *Palp. eonephela*, Meyr., and *leucosta*, Lower.

## LEPIDOTARSA, Meyr.

## LEPIDOTARSA IRIOIDES, Meyr.

Brisbane; one specimen from *Casuarina* in October.

## LEPIDOTARSA CHRYSORYTHRA, n. sp.

Male, 16 mm. Head yellow, with a red spot on crown. Palpi, second joint basal two-thirds whitish, apical one-third reddish-fuscous; terminal joint ochreous. Antennæ ochreous. Thorax yellow, mottled with bright-red. Abdomen pale-ochreous. Legs ochreous, anterior tibiæ and tarsi red, mottled externally with yellow, internally with fuscous. Forewings moderate, costa slightly arched, hindmargin oblique; yellow, coarsely reticulated with bright-red, with alternate bars of yellow and red along hindmargin; a pale-yellow streak along costa from base to apex, its anterior three-fourths edged internally with fuscous; a broad fuscous line from base close to inner-margin, reaching margin at one-fourth, and continued along it to three-fourths; a broad fuscous streak from anal angle obliquely towards centre of disc, where it terminates in a fine point; cilia red, apices fuscous, at anal angle fuscous. Hindwings elongate-ovate; pale ochreous-whitish; cilia whitish.

A truly brilliant insect.

Brisbane; one specimen taken at light.

## LEPIDOTARSA LEUCELLA, n. sp.

Male, 13 mm. Head, palpi, and antennæ white. Thorax white, finely irrorated with greyish-fuscous. Abdomen whitish. Legs white. Forewings white, faintly ochreous-tinged posteriorly; finely irrorated with greyish-fuscous; cilia ochreous-whitish. Hindwings and cilia ochreous-whitish.

Allied to *Lepid. alphitella*, Meyr., but without the discal dots.

Brisbane; one specimen beaten from ti-tree (*Melaleuca*) in October.

## EOCHROIS, Meyr.

The following have been taken near Brisbane:—

*Eochrois latiferana*, Walk.

I have reared this species from larvæ spinning together the phylloides of *Acacia longifolia*.

*Eochrois matutinella*, Walk.

“ *protophaës*, Meyr.

## EOMYSTIS, Meyr.

This genus was founded by Meyrick on a species of which he captured one specimen at Albany, Western Australia. It is interesting to note that another species, apparently belonging to the same genus, is to be found in Southern Queensland.

## EOMYSTIS ACRIBES, n. sp.

15-16 mm. Head yellow; face yellow with two orange dots. Palpi yellow, base of second joint orange. Antennæ whitish annulated with fuscous, basal joint orange. Thorax yellow coarsely reticulated with orange. Abdomen ochreous. Legs whitish, anterior pair dull reddish; anterior tarsi with yellow annulations; middle tibiæ purple-fuscous. Forewings moderate; costa strongly arched, apex rounded, hindmargin straight, oblique; bright yellow coarsely reticulated with reddish-orange; two narrow purple-fuscous fasciæ, first straight from one-third of costa to middle of hindmargin, second bent inwards in disc from two-thirds of costa to anal angle, both dilated on costa and inner margin; a purple-fuscous line along basal half of costa, and another along hindmargin from beneath apex to anal angle; cilia purple-fuscous. Hindwings ochreous; cilia ochreous, slightly fuscous-tinged at apex.

Brisbane. Two specimens.

## EURYPELTA, n. g.

Head with appressed scales, side tufts moderate, spreading, meeting above. Antennæ in male rather stout, with very short fine ciliations (one-fourth), pecten absent. Palpi moderate, second joint slightly exceeding base of antennæ, thickened with

rough scales anteriorly. Thorax smooth. Forewings dilated, apex rectangular, hindmargin nearly straight. Abdomen broad. Forewings with vein 7 to hindmargin, 2 from somewhat before angle of cell. Hindwings normal.

Differs from *Eomystis* in the short ciliations of the antennæ, and from *Eclecta* in the absence of a thoracic crest.

#### EURYPELTA EPIPREPES, n. sp.

Female, 23 mm. Head and face ochreous-yellow. Palpi ochreous-yellow, anterior surface tinged with dull reddish. Antennæ whitish annulated with fuscous. Thorax ochreous-yellow with a purple fuscous spot on each side. Abdomen ochreous. Legs ochreous, anterior and middle tibiæ and tarsi annulated with reddish. Forewings strongly dilated, costa strongly arched, apex rectangular, hindmargin nearly straight, very slightly oblique; ochreous-yellow irrorated thickly with dull reddish, markings dull purple fuscous; a transverse fascia close to base, its posterior edge very irregular and ill-defined; a squarish blotch on costa at one-third confluent with basal fascia, and sending an irregular transverse line to inner margin; a larger blotch on costa at two-thirds, from which proceed two wavy lines, the anterior ending abruptly before reaching inner margin, the posterior to anal angle; between the anterior of these lines and the second fascia is an irregular suffusion of dull purple fuscous; hindmargin outlined with the same; cilia ochreous-whitish, bases purple tinged. Hindwings and cilia ochreous.

Gympie, Queensland. One specimen taken by Mr. Illidge.

#### HEMIBELA, n. g.

Head with appressed scale, side tufts erect, spreading. Antennæ moderate (ciliations in male unknown), with strong pecten. Palpi, second joint reaching base of antennæ, thickened towards apex anteriorly with slight rough scales; terminal joint very minute, pointed. Thorax smooth. Abdomen stout. Forewings somewhat elongate; apex acute, slightly produced. Forewings with vein 7 to hindmargin, 2 from slightly before angle to cell. Hindwings normal.

Probably allied to *Eochrois*, but at once distinguished from any other genus by the extremely minute third joint of palpi.

#### HEMIBELA TRISPORA, n. sp.

Female, 26-28 mm. Head and thorax dull fuscous grey. Palpi fuscous, terminal joint pinkish. Antennæ fuscous. Abdomen ochreous. Legs whitish tinged with vinous, except posterior tibiæ. Forewings elongate; costa moderately arched, apex acute, slightly produced; hindmargin sinuate, oblique; dull

fuscous grey, irrorated with whitish scales except at base; inner margin reddish-brown at base; three small circular spots in disc near base, ochreous-yellow outlined with reddish-brown; basal spot internal to fold, posterior and obliquely external to this lie the other two spots in a line with the first; hindmarginal edge tinged with purple; cilia pale reddish purple, on costa and anal angle fuscous. Hindwings uniform ochreous-yellow; cilia ochreous-yellow, on costa and towards anal angle tinged with fuscous.

A singular-looking insect, not resembling any other known to me.

Brisbane. Two specimens, both female, taken at light.

#### EUPHILTRA, *Meyr.*

I have two new species certainly referable to this genus. The antennal ciliations are  $1\frac{1}{2}$  to 2.

#### EUPHILTRA THERMOZONA, n. sp.

14-15 mm. Head white, sides of crown with a dark fuscous spot. Palpi white, extreme base of second joint dark fuscous. Antennæ dark fuscous. Thorax, anterior three-fourths black, sometimes containing two white spots; posterior fourth white. Abdomen fuscous, lateral margins and tuft ochreous. Anterior and middle tibiæ fuscous; tarsi ochreous-whitish; posterior tibiæ and tarsi ochreous-whitish. Forewings somewhat narrow; costa moderately arched, apex rounded, hindmargin very obliquely rounded; clear white; a triangular black spot at base of costa not reaching to inner margin; a moderately broad reddish-fuscous transverse fascia from two-fifths of costa to middle of inner margin, dilated towards inner margin; anterior edge concave, margined with fuscous; posterior edge convex, not margined; a second similar fascia of equal breadth from two-thirds of costa to anal angle, on costa and anal angle dark fuscous; anterior edge nearly straight, suffused; posterior edge sinuate, well defined. These two fascia are connected in disc by a short oblique fuscous line; an ill-defined triangular reddish-fuscous patch narrowly separate from hindmargin and second fascia, some scattered dark fuscous scales at apex and along hindmargin; cilia pale reddish-fuscous on costa and hindmargin, blackish-fuscous at apex and anal angle. Hindwings dark grey; cilia whitish-ochreous mixed with grey around apex.

Closely allied to *Euphiltra eroticella*, *Meyr.*, but may be distinguished by the broader second fascia.

Brisbane. Three specimens.

#### EUPHILTRA ANGUSTIOR, n. sp.

12-14 mm. Head white. Palpi white, base of second joint

dark fuscous. Antennæ dark fuscous. Thorax white with two fuscous dots; shoulder tufts, anterior half fuscous, posterior half white. Abdomen ochreous-fuscous. Anterior and middle tibiæ and tarsi blackish-fuscous; posterior tibiæ and tarsi ochreous-whitish. Forewings somewhat narrow; costa slightly arched, apex rounded, hindmargin very obliquely rounded; white, a black spot at base of costa, not reaching inner margin; costal edge reddish-fuscous from base to first fascia; a transverse reddish-fuscous fascia from costa at two-fifths to middle of hindmargin, contracted on disc above middle, broadest on inner margin; it contains a few darker scales, but edges are not outlined; anterior edge concave, posterior edge sinuate; a very ill-defined ochreous fascia from costa at two-thirds to anal angle, thickly and irregularly irrorated with dark fuscous; a very ill-defined ochreous patch between second fascia and hindmargin, also irrorated with dark fuscous; a few dark fuscous dots on hindmargin; cilia ochreous. Hindwings grey; cilia whitish-ochreous tinged with grey.

Readily distinguishable from the other two species of the genus by its white thorax.

Brisbane. Three specimens.

#### ZONOPETALA, Meyr.

The following have been taken near Brisbane:—

- Zonopetala divisella*, Walk.
- “ *clerota*, Meyr.
- “ *decisana*, Walk.
- “ *glauconephela*, Meyr.
- “ *quadripustulella*, Walk.

